# EXHIBIT B - PURPOSE, NEED, PROPOSED PROJECT AND TIMING

### B.1.1 PURPOSE, NEED, PROPOSED PROJECT, AND TIMING

Purpose and Need for Proposed Project

- Sun-Canadian's NPS12 Pipeline provides an important connection supplying LVP product from Sarnia to London, Hamilton and Toronto. To support continued safe and reliable transportation of product and operation of the NPS12 Pipeline, Sun-Canadian is planning to replace approximately 480m of the existing pipeline in the vicinity of the East Sixteen Mile Creek with a new section of pipe, which will be installed at a depth that will eliminate three existing areas of shallow depth of cover. Replacement of the pipeline segment will maintain the continued reliable supply of fuel to the Greater Toronto and Hamilton Area in a safe and environmentally responsible manner.
- 2. Exhibit B.1.2-1 shows the existing Sun-Canadian NPS network in Ontario.
- 3. Sun-Canadian's 2019 annual water survey identified three locations along the pipeline with low or no cover. In the spring of 2019, Sun-Canadian undertook emergency mitigation measures including in-water pipe supports and protective armouring to temporarily stabilize and protect the infrastructure. Alternatives to replacing the pipeline in its current configuration were not considered preferred due to technical feasibility, socio-economic, and environmental impacts.
- 4. The NPS12 Pipeline from Waterdown to Toronto has operated safely since it was constructed in 1973. Sun-Canadian attributes this to its rigorous safety and integrity program that consists of regular in-line smart tool inspections, focused infield examination/repair activities, extensive damage prevention measures, and an effective landowner engagement process.

#### Proposed Project

- 5. The proposed Project involves installation of approximately 480m of pipeline in the vicinity of the East Sixteen Mile Creek crossing.
- 6. To reduce impacts to adjacent landowners and the environment, the replacement pipeline segment is located parallel to the existing pipeline alignment. The replacement pipeline segment is predominantly within the existing ROW, approximately 300m of new easement is required. Sun-Canadian is working with directly affected landowners to obtain the necessary agreements.
- 7. A cathodic protection system consisting of rectifier will be installed to protect the replacement pipeline segment from corrosion. Additional above-ground facilities along the pipeline include post-mounted signs identifying the pipeline, aerial patrol signs for fixed wing patrols, fence stiles, foot bridges for ditch crossings (if applicable), and "test boxes" located along fence lines at roads that are used to assess the adequacy of the corrosion protection system.
- 8. The replacement pipeline segment will be constructed using Horizontal Directional

Drilling (HDD). HDD is a technique whereby a tunnel is drilled with electronically guided drilling pipe that is lubricated with a drilling fluid. The pipeline is then constructed on the surface and pulled through the tunnel. HDD is a less intrusive construction method than traditional open cut crossings of a watercourse.

- 9. After the replacement pipeline segment is installed, the existing segment of NPS12 pipeline that is no longer required will decommissioned. This will consist of the pipe being purged of product, capped, filled with concrete, deactivated and left in-place, following all relevant safety and technical standards.
- 10. A map of the Project in relation to the Sun-Canadian network within Ontario is shown on Exhibit E.1.1-1.

### **Project Timing**

11. Subject to regulatory and permitting approvals, the construction of the Project is planned to occur in 2022. Once constructed, the pipeline is expected to continue to operate for 50 years. A Project construction schedule is provided as Exhibit D.1.6.

## **B.1.2 MAP OF PREFERRED ROUTING**

Figure B.1.2-1: Sun-Canadian Pipeline Network

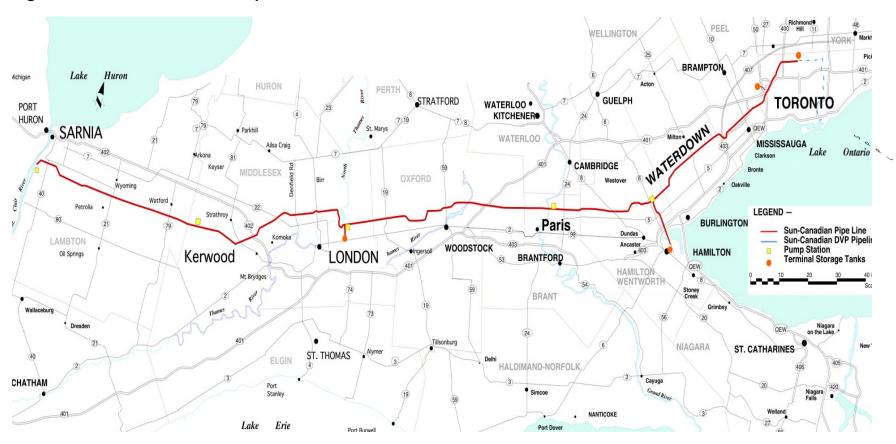


Figure B.1.2-2: Preferred Route

